

Scientist in the Spotlight event this month

December 1, 2016

Seeing nano

Come by and play in a simplified version of a nano lab! Nano means one billionth of something so a nanometer is one billionth of a meter. To help put that in perspective, a sheet of newspaper is about 100,000 nanometers thick. So, how do you see something that's smaller than a particle of light? If you stop by, Noah Orfield, with the Lab's Center for Integrated Nanotechnologies, will help give you a sense of how such tiny structures can be observed in the lab and what we're learning about their properties. You've just gotta "see" this. Fun for all ages.

How environments affects supercomputer reliability

The earth is under constant assault by cosmic radiation. This radiation includes high-energy neutrons that affect computer electronics and can cause data corruption. You don't typically see this on personal computers because of protections built into them and they are—physically—small targets. Compare that to supercomputers that are made up of densely packed circuits large enough to cover a football field to a height of seven feet. This activity depicts computer memory, how it stores its ones and zeros, and how a neutron bouncing through the memory could cause information corruption. Nathan DeBardeleben, with the High Performance Computing Design group, also illustrates the ways the high-performance computing community detects and corrects errors at the bleeding edge of massive and critical computation.

Join us every second Saturday of the month for Scientist in the Spotlight, a program featuring scientists that have been certified for public outreach through the museum's Scientist Ambassador Academy. These scientists will talk with Museum visitors for a couple of hours about their favorite science, technology, engineering, or math (STEM) subject. Conversations are intended for all ages and include interactive, hands-on activities that make learning easy and fun. [Learn more about the Scientist Ambassador academy.](#)

1350 Central Avenue
Los Alamos, NM 87545



BRADBURY

SCIENCE

museum

(505) 667-4444
www.lanl.gov/museum